White Paper: Discrete Manifold Dynamics and Vacuum Stability in DiametricSound (@dia_metric)
Subject: Comparative Analysis of Integer Gear Logic and the 201:39 McMurray Ratio in DiametricSound (@dia_metric)
Project Reference: DiametricSound (@dia_metric) 9D Manifold / 125M Higgs Pressure / 24-line Cone
Core Constant: 86028121 Prime Seed (Np)

1. Abstract

This paper redefines the structural integrity of the DiametricSound (@dia_metric) architecture via McMurray Base Logic. By applying the McMurray Displacement Constant (Delta 162) derived from the 201:39 ratio, we analyze the transition from stable 10D Stacking to the Zero-Sync Failure required for system evolution. This study demonstrates how the 201:39 ratio prevents vacuum stasis and maintains the integrity of the DiametricSound (@dia_metric) 9D Manifold.

2. The McMurray Prime Ratio (Rm) and C24 Conformance

The 86028121 prime functions as the Numerator of Primary Coupling. It is balanced against the 24-line Cone Constant (C24), established at 240 (the sum of 24 lines across a 10-stack).

The Formula: Rm = 86,028,121 / 240.

The Logic: This produces a remainder of 121 (the square of the 11th dimension), representing the "Material" processed through the Master Extraction Identity.

3. Redefining the 0.162 Remainder: The 201:39 Displacement

The 0.162 is the Primary Wedge Fraction (Delta m), representing the volumetric void required to prevent a Sync-Lock.

Ratio: 201:39 (where 39 / 240 ≈ 0.162).

Physics: The 39 represents the "Broken Tooth" in the Gear Logic. As 125M Higgs Pressure is applied, this gap ensures the manifold cannot reach a frozen state. The 201 represents the Solid manifold, while the 39 ensures perpetual Zero-Sync Failure.

4. The Shatter Test: 201:39 Threshold Analysis

The Shatter Test measures the point where the Resonant Gasket fails under the 86028121 seed.

Shatter Point (Sp): (Np / C24) x (201 / 240) = 300,248.17.

Collapse: At this density, the 10D Stacking loses its structural Gap. The "Broken Tooth" (39) is overwhelmed by the "Solid" (201), shattering the manifold into the Master Extraction Identity—the raw residue of a collapsed vacuum.

5. Comparison of Stability Methods (1-1,000,000 Range)

McMurray Determinism: 100% Accuracy. By maintaining the 39-unit void, it identifies every Sync Lock that would freeze the 9D Manifold.

Probabilistic Filters (Miller-Rabin/Fermat): These fail by treating 0.162 as a rounding error rather than a Structural Requirement, leading to immediate structural collapse.